

### **DETAILED ACTION**

1. This action is in response to the following: BPAI Decision filed 05/26/2011.

#### ***Allowable Subject Matter***

2. Claims 1-21 allowed.

The following is an examiner's statement of reasons for allowance: The prior art of Geigel teaches the limitation: "FIG. 3 illustrates a genetic crossover operation for trees 80 and 82. For the crossover operation, random nodes 88, 90 are selected for each parent and the sub-tree from these chosen nodes are swapped. This results in the 'after crossover' trees 84 and 86, and the illustration demonstrates the change that occurs. Similarly, FIG. 4 illustrates a genetic mutation operation for tree 92. Nodes from the tree 96 and 98 are randomly chosen, then swapped. Tree 94 illustrates the change from tree 92 when this swap occurs...The genome for the page creator module makes use of a tree structure as illustrated in FIG. 8. The root of the tree, node 148, represents the entire photo album. Interior nodes, 150, 152, 154, 156, 158, 160, 162, and 164 represent a structure of hierarchical visual groupings of images, which, in turn, are represented by the leaf nodes 166. However, it is equally suitable to replace this tree based encoding with a simpler data structure based on arrays. ". But the claims recite a different combination of limitation: "...initiating a first current binary tree comprising a leaf node associating a first object selected from the set with the leaf node; establishing candidate binary

Art Unit: 2179

trees, wherein each of the candidate binary trees comprises the current binary tree and a respective leaf node associated with another object selected from the set, and locations of the leaf nodes within each of the candidate binary trees correspond to relative positions of the associated objects within the area; computing a respective score for each of the candidate binary trees selecting one of the candidate binary trees as the current binary tree based on the computed score; repeating the establishing, the computing, and the selecting until the current binary tree includes all the objects in the set; after the repeating, arranging the objects within the area in accordance with the locations of the leaf nodes within the candidate binary tree", that is not suggested or shown by Geigel. Although Geigel is concerned with representing a photo album page through the use of a storage tree, but the method of how that tree is formed and the final output of the page differ from the immediate application. In addition Geigel suggest using arrays over trees, for reason of simplicity, throughout part of the disclosure, this is because Geigel's method of using and forming trees of data is more difficult than what is presented in the immediate application.

The dependent claims further add limitations to the allowable subject matter of the corresponding independent claims; thus are also allowable. Therefore the claims are allowed over the art because the claims differ in scope that is not seen or suggested by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Inquires***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056 and fax is 571-270-2056. The examiner can normally be reached on Monday - Friday: 9:30am- 5:00pm Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2179

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas Augustine/  
Primary Examiner, Art Unit 2179  
08/16/2011